



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/039,054	12/31/2001	Rajeev K. Nalawadi	42390P12867	9089

8791 7590 04/06/2006

BLAKELY SOKOLOFF TAYLOR & ZAFMAN
12400 WILSHIRE BOULEVARD
SEVENTH FLOOR
LOS ANGELES, CA 90025-1030

EXAMINER

BAE, JI H

ART UNIT	PAPER NUMBER
----------	--------------

2115

DATE MAILED: 04/06/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/039,054	Applicant(s) NALAWADI ET AL.	
	Examiner Ji H. Bae	Art Unit 2115	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 31 December 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10 April 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

Applicant's arguments with respect to claims 1-18 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 5, 6, 11, 12, 17, and 18 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claim 5, applicant has variously recited "the predefined SMI-compatible task" [line 1] and "a predefined SMM-compatible task" [line 4]. The parent of claim 5 also recites "a predefined SMM-compatible task" [claim 4, line 3]. Additionally, applicant has recited generating "a SMI request" in line 3 of claim 5. It is noted that applicant has already recited generating "a SMI request" in claim 1. It is unclear whether these limitations are intended to be distinct from one another, or references to the same limitation. Applicant is reminded to use consistent terminology to properly distinguish between new limitations and those previously recited.

Claim 6 recites the limitation "the SMI generation register" in line 1. There is insufficient antecedent basis for this limitation in the claim. There is no prior recitation of an SMI generation register in the claim or its parents (claims 4 and 1). Additionally, applicant has recited "an SMM-compatible task" in line 2. Applicant has already recited a predefined SMM-compatible task and a predefined SMI-compatible task in claim 5. It is unclear whether these limitations are

Art Unit: 2115

intended to be distinct from one another, or references to the same limitation. Applicant is reminded to use consistent terminology to properly distinguish between new limitations and those previously recited.

Claims 11, 12, 17, and 18 are rejected on similar grounds as those of claims 5 and 6.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 1-18 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

Claims 1-18 recite a method and machine readable medium with instructions that implement the method. Applicant's claimed invention is directed towards a method for executing a process. Examiner notes that the apparent intent of applicant's claimed method is not to achieve some result from the execution of the process, but rather the execution of the process itself. As such, applicant's claimed invention is merely an abstract idea that does not produce a useful, concrete, and tangible result. Therefore, claims 1-18 are non-statutory.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Art Unit: 2115

Claims 1 and 13 are rejected under 35 U.S.C. 102(b) as being anticipated by Hobson, U.S. Patent No. 6,122,748.

Regarding claim 1, Hobson teaches:

generating a SMI request under ACPI control [col. 5, lines 35-48];

changing an operation mode of a processor to the SMM in response to the SMI request;

and

executing a resume ACPI control process to return the processor to ACPI control after the process is complete [col. 5, lines 54-62].

Regarding claim 13, Hobson teaches the method of claim 1. Hobson also teaches the machine readable medium with instructions to implement the claimed method. Hobson also teaches that while in SMM, the processor executes tasks [col. 6, lines 60-64, configuring].

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 2, 3, 7-9, 14, and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hobson in view of Intel [Intel's SL Enhanced Intel486 Microprocessor Family, June 1993].

Regarding claim 2, Hobson teaches the method of claim 1, but does not teach saving processor state map information in a first area of a memory upon reception of the SMI request.

Intel teaches that upon generating an SMI, the processor saves the state of the system or SMRAM [page 2, "System-Level Power Management"].

It would have been obvious to one of ordinary skill in the art to combine the teachings of Hobson and Intel by saving the processor state map information in a first area of memory, as taught by Intel. Hobson's disclosure teaches a processor transitioning between an ACPI control and an SMM, and teaches that exemplary processors include those from the Intel 80X86 family [col. 3, lines 40-42]. Since the disclosure of Intel is directed towards the same family of processors, it would have been obvious to one of ordinary skill in the art that the transitioning between ACPI and SMM would have been implemented in the manner taught by Intel.

Regarding claim 3, Hobson teaches setting SMI enable in a SMI generation register [col. 4, lines 14-18].

Regarding claims 7-9, Hobson and Intel teaches the method of claims 1-3. Hobson also teaches that while in SMM, the processor executes tasks [col. 6, lines 60-64, configuring]. Additionally, it would have been obvious to one of ordinary skill in the art to delegate tasks to various processors to achieve faster execution.

Regarding claims 14 and 15, Hobson and Intel teaches the method of claims 2 and 3. Hobson and Intel also teaches the machine readable medium with instructions to implement the claimed method.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

Zimmer et al., U.S. Patent No. 6,775,728 B2;

Wang, U.S. Patent No. 6,895,517 B2.

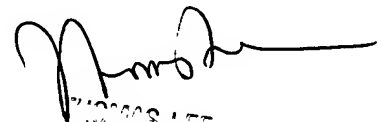
Art Unit: 2115

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ji H. Bae whose telephone number is 571-272-7181. The examiner can normally be reached on Monday-Friday, 10 am to 6:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas Lee can be reached on 571-272-3667. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Ji H. Bae
Patent Examiner
Art Unit 2115
ji.bae@uspto.gov
571-272-7181



THOMAS LEE
SUPERVISOR
ART UNIT 2115